CLAIM AMENDMENTS:

1-11 cancelled

12. (new) A sensor for a short range detection or parking assistance system in a vehicle, the sensor comprising:

a pot-shaped housing having a floor configured as a vibration membrane; and a weather resistant, paintable powder coating disposed on at least an outer side of said housing, said coating structured

and dimensioned to permit adequate vibration performance

of said membrane.

- 13. (new) The sensor of claim 12, wherein the sensor is an ultrasound sensor.
- 14. (new) The sensor of claim 12, wherein said housing is made from a metallic material, with said powder coating being disposed directly onto said metallic material.
- 15. (new) The sensor of claim 12, wherein said housing is made from a metallic material, and further comprising an intermediate layer disposed between said metallic material and said powder coating.
- 16. (new) The sensor of claim 12, wherein said housing comprises aluminum or an aluminum alloy.

- 17. (new) The sensor of claim 12, wherein said powder coating is manufactured from at least one of an acrylic powder, a polyester powder, and an epoxide powder.
- 18. (new) The sensor of claim 12, wherein said powder coating has a dark color.
- 19. (new) The sensor of claim 18, wherein said powder coating has a black color.
- 20. (new) The sensor of claim 12, wherein at least sections of said powder coating are painted.
- 21. (new) The housing for the sensor of claim 12.
- 22. (new) A method for the production of the sensor of claim 12, wherein said housing is coated with powder to effect said powder coating.
- 23. (new) The method of claim 22, wherein said housing is painted following said powder coating.
- 24. (new) The method of claim 22, wherein said housing is constructed without further treatment.
- 25. (new) The method of claim 22, wherein said housing is pretreated prior to said powder coating.

26. (new) The method of claim 25, wherein said pretreatment comprises introduction of an immediate layer.